

4 H.P. DUST COLLECTOR MODEL G9958 INSTRUCTION MANUAL



COPYRIGHT © NOVEMBER, 2001 BY GRIZZLY INDUSTRIAL, INC.

WARNING: NO PORTION OF THIS MANUAL MAY BE REPRODUCED IN ANY SHAPE
OR FORM WITHOUT THE WRITTEN APPROVAL OF GRIZZLY INDUSTRIAL, INC.

PRINTED IN TAIWAN.

WARNING

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- Lead from lead-based paints.
- Crystalline silica from bricks, cement, and other masonry products.
- Arsenic and chromium from chemically treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

Table Of Contents

| | | PAGE |
|------------|--|------|
| 1. | SAFETY | |
| | SAFETY INSTRUCTIONS FOR POWER TOOLS | 2 |
| | ADDITIONAL SAFETY INSTRUCTIONS FOR DUST COLLECTORS | 4 |
| 2. | CIRCUIT REQUIREMENTS | |
| | 220V OPERATION | 5 |
| | CIRCUIT LOAD | 5 |
| | GROUNDING | |
| | EXTENSION CORDS | 6 |
| 3. | INTRODUCTION | |
| | COMMENTARY | 7 |
| | UNPACKING | |
| | PIECE INVENTORY | 8 |
| | CLEAN UP | 9 |
| | SITE CONSIDERATIONS | 9 |
| 4. | ASSEMBLY | |
| | BEGINNING ASSEMBLY | 10 |
| | BASE | 10 |
| | FAN/MOTOR ASSEMBLY | 11 |
| | COLLECTORS | |
| | SUPPORT BRACKETS | 12 |
| | 4 TO 1 INLET | 12 |
| 5. | ADJUSTMENTS | |
| | GENERAL | |
| | MATERIAL SELECTION | 13 |
| | SYSTEM GROUNDING | |
| | DESIGN SUGGESTIONS | 15 |
| 6. | OPERATIONS | |
| | TEST RUN | 16 |
| | GENERAL | 16 |
| 7 . | MAINTENANCE | |
| | GENERAL | 17 |
| | LUBRICATION | 17 |
| | BAG CLEANING | 17 |
| 8. | CLOSURE | 18 |
| | | |
| | ACHINE DATA | |
| | ARTS BREAKDOWN AND PARTS LISTS20 |)-21 |
| W | ARRANTY AND RETURNS | 22 |

SECTION 1: SAFETY

AWARNING

For Your Own Safety Read Instruction Manual Before Operating This Equipment

The purpose of safety symbols is to attract your attention to possible hazardous conditions. This manual uses a series of symbols and signal words which are intended to convey the level of importance of the safety messages. The progression of symbols is described below. Remember that safety messages by themselves do not eliminate danger and are not a substitute for proper accident prevention measures.



Indicates an imminently hazardous situation which, if not avoided, WILL result in death or serious injury.

AWARNING

Indicates a potentially hazardous situation which, if not avoided, COULD result in death or serious injury.

ACAUTION

Indicates a potentially hazardous situation which, if not avoided, MAY result in minor or moderate injury. It may also be used to alert against unsafe practices.

NOTICE

This symbol is used to alert the user to useful information about proper operation of the equipment.

AWARNINGSafety Instructions For Power Tools

- KEEP GUARDS IN PLACE and in working order.
- 2. REMOVE ADJUSTING KEYS AND WRENCHES. Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning on.
- **3. KEEP WORK AREA CLEAN.** Cluttered areas and benches invite accidents.
- 4. DO NOT USE IN DANGEROUS ENVI-RONMENT. Do not use power tools in damp or wet locations, or where any flammable or noxious fumes may exist. Keep work area well lighted.

- 5. KEEP CHILDREN AND VISITORS AWAY. All children and visitors should be kept a safe distance from work area.
- **6. MAKE WORKSHOP CHILD PROOF** with padlocks, master switches, or by removing starter keys.
- DO NOT FORCE TOOL. It will do the job better and safer at the rate for which it was designed.
- **8. USE RIGHT TOOL.** Do not force tool or attachment to do a job for which it was not designed.

AWARNING

Safety Instructions For Power Tools

9. USE PROPER EXTENSION CORD. Make sure your extension cord is in good condition. Conductor size should be in accordance with the chart below. The amperage rating should be listed on the motor or tool nameplate. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. Your extension cord must also contain a ground wire and plug pin. Always repair or replace extension cords if they become damaged.

Minimum Gauge for Extension Cords

| | LENGTH | | | |
|------------|--------|-----------------|----|--|
| AMP RATING | 25ft | 25ft 50ft 100ft | | |
| 0-6 | 18 | 16 | 16 | |
| 7-10 | 18 | 16 | 14 | |
| 11-12 | 16 | 16 | 14 | |
| 13-16 | 14 | 12 | 12 | |
| 17-20 | 12 | 12 | 10 | |
| 21-30 | 10 | 10 | No | |

- 10. WEAR PROPER APPAREL. Do not wear loose clothing, gloves, neckties, rings, bracelets, or other jewelry which may get caught in moving parts. Non-slip footwear is recommended. Wear protective hair covering to contain long hair.
- 11. ALWAYS USE SAFETY GLASSES. Also use face or dust mask if cutting operation is dusty. Everyday eyeglasses only have impact resistant lenses, they are NOT safety glasses.
- **12. SECURE WORK.** Use clamps or a vise to hold work when practical. It's safer than using your hand and frees both hands to operate tool.
- **13. DO NOT OVER-REACH.** Keep proper footing and balance at all times.
- **14. MAINTAIN TOOLS WITH CARE.** Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
- 15. USE RECOMMENDED ACCESSORIES.

 Consult the owner's manual for recommended accessories. The use of improper accessories may cause risk of injury.

- 16. REDUCE THE RISK OF UNINTENTION-AL STARTING. On machines with magnetic contact starting switches there is a risk of starting if the machine is bumped or jarred. Always disconnect from power source before adjusting or servicing. Make sure switch is in OFF position before reconnecting.
- 17. MANY WOODWORKING TOOLS CAN "KICKBACK" THE WORKPIECE toward the operator if not handled properly. Know what conditions can create "kickback" and know how to avoid them. Read the manual accompanying the machine thoroughly.
- 18. CHECK DAMAGED PARTS. Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.
- 19. NEVER LEAVE TOOL RUNNING UNAT-TENDED. TURN POWER OFF. Do not leave tool until it comes to a complete stop.
- 20. NEVER OPERATE A MACHINE WHEN TIRED, OR UNDER THE INFLUENCE OF DRUGS OR ALCOHOL. Full mental alertness is required at all times when running a machine.
- 21. NEVER ALLOW UNSUPERVISED OR UNTRAINED PERSONNEL TO OPER-ATE THE MACHINE. Make sure any instructions you give in regards to machine operation are approved, correct, safe, and clearly understood.
- 22. IF AT ANY TIME YOU ARE EXPERIENC-ING DIFFICULTIES performing the intended operation, stop using the machine! Then contact our service department or ask a qualified expert how the operation should be performed.

AWARNING

Additional Safety Instructions For The Dust Collector

- 1. THIS DUST COLLECTOR IS TO BE USED FOR WOOD DUST COLLECTION ONLY. Do not use this dust collector to pick up liquids and metal scrap including, but not limited to, nails and filings. Metallic debris will contact the spinning impeller and could spark. The spark could then cause a sawdust explosion and severe fire hazard. Also, do not pick up material which cannot safely pass through the impeller such as solid wood scraps.
- 2. DO NOT PLACE YOUR HANDS OR TOOLS NEAR THE OPEN INLET during operation for any reason including, but not limited to, unclogging material and testing suction. The impeller could cause serious damage to body parts if touched while spinning.
- PROBLEMS CONCERNED WITH ANY MOVING PART(S) or accessories must be investigated and corrected with the power disconnected and after everything has come to a complete stop.
- 4. SUSPENDED DUST PARTICLES IN CON-JUNCTION WITH AN IGNITION SOURCE, may cause an explosion. Do not operate the dust collector in areas where explosion risks would be high if dust were dispersed into the area. Areas of high risk include, but are not limited to, areas near pilot lights and/or open flames.

- 5. DO NOT ALLOW STEEL TO STRIKE AGAINST STEEL WHICH MAY PRODUCE A SPARK. Sparks can smolder in wood dust for a long time before fire or flame is detected. If metal contacts metal during operation, immediately turn off the dust collector, unplug the power cord from the outlet or throw the disconnect and wait for all moving parts to stop. Remove collection bags and empty the dust into an approved air tight metal container in case of spark. Remedy the metal to metal contact problem before resuming operation.
- 6. WHEN EMPTYING DUST FROM THE COL-LECTION BAGS, wear a respirator and safety glasses. Empty dust into an approved container and dispose of properly.
- 7. IF AT ANY TIME YOU ARE EXPERIENC-ING DIFFICULTIES PERFORMING THE INTENDED OPERATION, stop using the machine! Then contact our service department or ask a qualified expert how the operation should be performed.
- 8. BE AWARE THAT CERTAIN WOODS MAY CAUSE AN ALLERGIC reaction in people and animals, especially when exposed to fine dust. Make sure you know what type of wood dust you will be exposed to and the possibility of a allergic reaction. Always wear an approved respirator!

ACAUTION

No list of safety guidelines can be complete. Every shop environment is different. Always consider safety first, as it applies to your individual working conditions. Use this and other machinery with caution and respect. Failure to follow guidelines could result in serious personal injury, damage to equipment or poor work results.

SECTION 2: CIRCUIT REQUIREMENTS

220V Operation

The Model G9958 has a 4 H.P., 3450 R.P.M. motor which requires a 220V single-phase circuit. The cord set enclosed does not have a plug as the style of plug you require will depend upon the type of service you currently have or plan to install. The motor will draw about 32 amps at 220V under load. If you operate the Model G9958 on any circuit that is already close to its capacity, it might blow a fuse or trip a circuit breaker. However, if an unusual load does not exist, and the circuit breaker still trips, have the circuit inspected by a qualified electrician. Do not attempt to modify an existing circuit by replacing the circuit breaker with one rated for a higher amperage.



Circuit Load



AWARNING

If you are unsure about the correct installation or modification of electrical circuits, please consult the advice of a qualified electrician. Failure to do so could result in serious personal injury.

When operating at 220V, we recommend using a NEMA-style L6-50 plug and outlet as shown in Figure 1. We also recommend using wire capable of handling a 50 amperage draw. Only a 35 amp circuit breaker is needed in the circuit though because the Model G9958 will only draw about 32 amps under load. It is always a good idea to match the amperage rating of the wiring to the plug and outlet, even if you will be using a lower amerage circuit breaker. This allows the future modification of the circuit up to the maximum amerage rating of the plug, outlet and wiring, by installing a matching amp rated circuit breaker. You may also "hard-wire" the machine directly to your panel, provided you place a disconnect switch near the machine. Check the electrical codes in your area for specifics on wiring requirements.

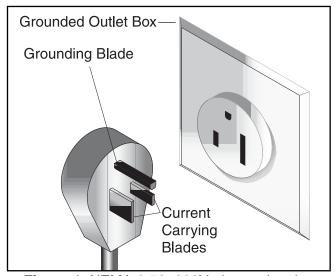


Figure 1. NEMA 6-50, 220V plug and outlet.



Grounding

In the event of an electrical short, grounding provides electric current a path of least resistance to reduce the risk of electrical shock. This tool is equipped with an electric cord having an equipment-grounding conductor which must be properly connected to a grounding plug. The plug must be plugged into a matching outlet that is properly installed and grounded in accordance with all local codes and ordinances.

Improper connections of the electrical-grounding conductor can result in the risk of electric shock. The conductor with green or green and yellow striped insulation is the electrical-grounding conductor. If repair or replacement of the electric cord or plug is necessary, do not connect the equipment grounding conductor to a live terminal.





This equipment must be grounded. Verify that any existing electrical outlet and circuit you intend to plug into is actually grounded. Under no circumstances should the grounding pin from any three-pronged plug be removed. Serious injury may occur.



Extension Cords

We do not recommend the use of extension cords with 220V equipment. It is much better to arrange the placement of your equipment and the installed wiring to eliminate the need for extension cords. Should it be necessary to use an extension, make sure the cord is rated Hard Service (grade S) or better. Refer to the chart in **Section 1: Safety Instructions** to determine the minimum gauge for the extension cord when using either 110V or 220V. The extension cord must also contain a ground wire and plug pin. Always repair or replace extension cords when they become worn or damaged.



ACAUTION

We have covered some basic electrical requirements for the safe operation of your machine. These requirements are not necessarily comprehensive. You must be sure that your particular electrical configuration complies with local and state codes. Ensure compliance by checking with your local municipality or a licensed electrician.

SECTION 3: INTRODUCTION

Commentary

We are proud to offer the Grizzly Model G9958 Dust Collector. The Model G9958 is part of a growing Grizzly family of fine woodworking machinery. When used according to the guidelines set forth in this manual, you can expect years of trouble-free, enjoyable operation and proof of Grizzly's commitment to customer satisfaction.

The Model G9958 is a 4 H.P., 3560 CFM dust collector, capable of handling 4 or more running machines at one time. The dust collector also features a magnetic switch, 13" impeller and 4 bag collection. A number of fittings, hoses, pipes, bags and accessories for the Model G9958 are available through the Grizzly catalog.

We are also pleased to provide this manual with the Model G9958. It was written to guide you through assembly, review safety considerations, and cover general operating procedures. It represents our effort to produce the best documentation possible. If you have any comments regarding this manual, please write to us at the address below:

Grizzly Industrial, Inc.

c/o Technical Documentation
P.O. Box 2069

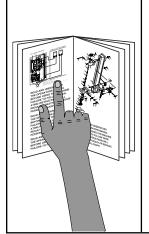
Bellingham, WA 98227-2069

Most importantly, we stand behind our machines. If you have any service questions or parts requests, please call or write us at the location listed below.

Grizzly Industrial, Inc. 1203 Lycoming Mall Circle Muncy, PA 17756 Phone: (570) 546-9663 Fax: (800) 438-5901

E-Mail: techsupport@grizzly.com Web Site: http://www.grizzly.com

The specifications, drawings, and photographs illustrated in this manual represent the Model G9958 as supplied when the manual was prepared. However, owing to Grizzly's policy of continuous improvement, changes may be made at any time with no obligation on the part of Grizzly. Whenever possible, though, we send manual updates to all owners of a particular tool or machine. Should you receive one, we urge you to insert the new information with the old and keep it for reference.



AWARNING

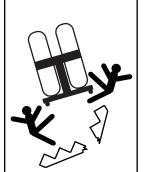
Read the manual before assembly and operation. Become familiar with the machine and its operation before beginning any work. Serious personal injury may result if safety or operational information is not understood or followed.



Unpacking

The Model G9958 is shipped from the manufacturer in a carefully packed carton. If you discover the machine is damaged after you've signed for delivery, immediately call Customer Service for advice.

When you are completely satisfied with the condition of your shipment, you should inventory its parts.



AWARNING

If moving this machine up or down stairs, the machine must be dismantled and moved in smaller pieces. Make sure floor and stair structures are capable of supporting the combined weight of the machine parts and the people moving them.



WARNING

The G9958 is a heavy machine, 320 lbs. shipping weight. DO NOT over-exert yourself while unpacking or moving your machine – you will need assistance. Serious personal injury may occur if safe moving methods are not followed.



ACAUTION

Some metal parts may have sharp edges on them after they are formed. Please examine the edges of all metal parts before handling them. Failure to do so could result in injury.



Piece Inventory

After all the parts have been removed from the carton as shown in **Figure 2**, you should have:

- Main Base
- Right and Left Side Base
- Right and Left Side Legs
- Fan/Motor Assembly
- Collector Bodies
- Eight Casters
- Gaskets
- Two Upper Bag Supports
- Two Hangers
- Hardware Bag
- Two Bottom Bags
- Two Upper Bags
- Four Hole Inlet

In the event that any nonproprietary parts are missing (e.g. a nut or a washer), we would be glad to replace them, or, for the sake of expediency, replacements can be obtained at your local hardware store.

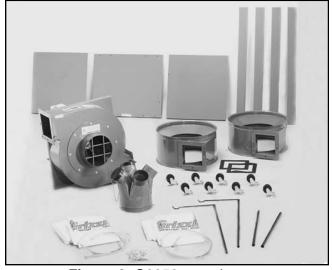


Figure 2. G9958 parts layout.

NOTICE

A full parts list and breakdown can be found toward the end of this manual. For easier assembly, or to identify missing parts, please refer to the detailed illustrations at the end of the manual.



Clean Up

The unpainted surfaces are coated with a waxy oil to protect them from corrosion during shipment. Remove this protective coating with a solvent cleaner or citrus-based degreaser such as Grizzly's G7895 Degreaser. Avoid chlorine-based solvents as they may damage painted surfaces should they come in contact. Always follow the usage instructions on the product you choose for clean up.



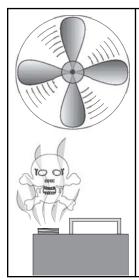
AWARNING

Do not use gasoline or other petroleum-based solvents. They have low flash points which make them extremely flammable. A risk of explosion and burning exists if these products are used. Serious personal injury may occur if this warning is ignored.



AWARNING

Do not smoke while using solvents. A risk of explosion or fire exists and may result in serious personal injury.



ACAUTION

Many of the solvents commonly used to clean machinery can be toxic when inhaled or ingested. Always work in well-ventilated areas far from potential ignition sources when dealing with solvents. Use care when disposing of waste rags and towels to be sure they do not create fire or environmental hazards.



Site Considerations

FLOOR LOAD

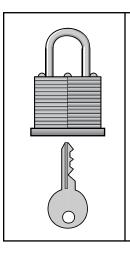
Your Model G9958 represents a moderate weight load in an average footprint. Most commercial or home shop floors should be sufficient to carry the weight of the Model G9958. If you question the strength of your floor, you can opt to reinforce it.

WORKING CLEARANCES

Working clearances can be thought of as the distances between machines and obstacles that allow safe operation of every machine without limitation. Consider existing and anticipated machine needs, size of material to be processed through each machine, and space for auxiliary stands and/or work tables. Also, consider the relative position of each machine to one another for efficient material handling. Be sure to allow yourself sufficient room to safely run your machines in any foreseeable operation and keep dust collection hoses off the floor and out of the way.

LIGHTING AND OUTLETS

Lighting should be bright enough to eliminate shadows and prevent eye strain. Electrical circuits should be dedicated or large enough to handle combined motor amp loads. Outlets should be located near each machine so power or extension cords are not obstructing high-traffic areas. Be sure to observe local electrical codes for proper installation of new lighting, outlets, or circuits.



ACAUTION

Make your shop "child safe." Ensure that your workplace is inaccessible to youngsters by closing and locking all entrances when you are away. Never allow visitors in your shop when assembling, adjusting or operating equipment.



SECTION 4: ASSEMBLY

Beginning Assembly



AWARNING

Disconnect power to the machine when performing any maintenance, assembly or adjustments. Failure to do this may result in serious personal injury.



WARNING

Keep loose clothing rolled up and out of the way of machinery and keep hair pulled back.



WARNING

Wear safety glasses during the entire assembly process. Failure to comply may result in serious personal injury.



CAUTION

Some metal parts may have sharp edges on them after they are formed. Please examine the edges of all metal parts before handling them. Failure to do so could result in injury.

Most of your Model G9958 has been assembled at the factory, but some parts must be assembled or installed after delivery. We have organized the assembly process into steps. Please follow along in the order presented here.

TOOLS REQUIRED: You will need a 12 and 14mm wrench.

Base

Start by turning the main base upside down and placing it on a level surface. Mount four of the casters to the corners with (16) $\frac{5}{16}$ " x $\frac{1}{2}$ " hex bolts as shown in **Figure 3.**

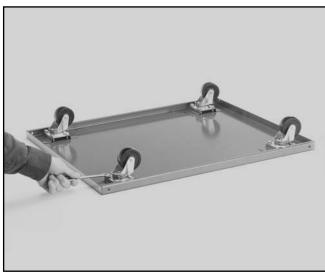


Figure 3. Mounting casters to main base.

Place the left and right side bases upside down and attach the remaining four casters to the corners with the four mounting holes as shown in **Figure 4.** Use the same fasteners and procedure as on the main base.

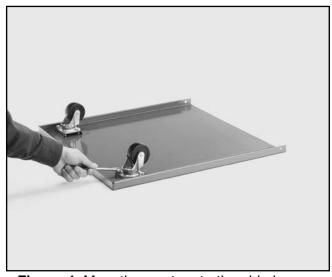


Figure 4. Mounting casters to the side bases.



Align the right and left side bases with the main base and attach them using (8) $\frac{5}{16}$ " x $\frac{1}{2}$ " hex bolts as shown in **Figure 5.**

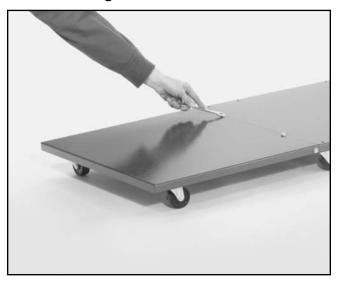


Figure 5. Assembling the three base sections.



Fan/Motor Assembly

Lay the fan/motor assembly upside down and attach the four legs using (8) $\frac{5}{16}$ " x $\frac{1}{2}$ " hex bolts as shown in **Figure 6.**

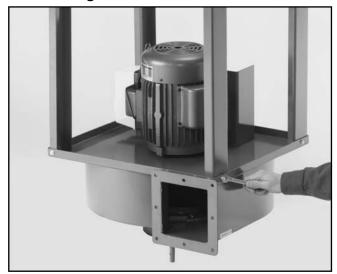


Figure 6. Connect the fan/motor to the legs.

Turn the fan/motor assembly rightside up and place it on top of the base assembly. Line up the mounting holes in the legs with those in the base and attach using (8) $\frac{5}{16}$ " x $\frac{1}{2}$ " hex bolts as shown in **Figure 7.**



Figure 7. Attach the fan/motor/leg to the base.



Collectors

Place one of the rubber gaskets on one of the two intake openings. While holding the gasket in place, attach one of the collectors to the intake opening, making sure the gasket is aligned with the mounting holes. Fasten them together using (8) ⁵/₁₆" x 1" hex bolts as shown in **Figure 8**. Repeat this procedure for attaching the second collector to the other intake opening. Make sure these bolts are fastened tight so they make a good seal.



Figure 8. Attaching the collectors.



Support Brackets

Connect the two upper bag supports and hanger rods using (4) $\frac{1}{4}$ " x $\frac{1}{2}$ " hex head bolts. Next, slide the support bracket assemblies into each of the mounting holes on the fan/motor assembly and fasten with (2) $\frac{1}{4}$ " x $\frac{1}{2}$ " hex head bolts. See **Figure 9.**

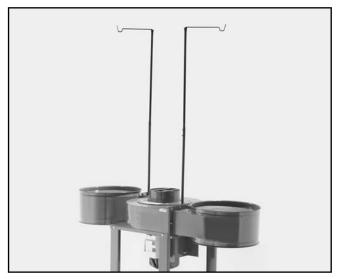


Figure 9. Attaching the support brackets.

Hook the loops at the top of the upper bags over the support bracket hangers as shown in **Figure 10**. Pull the upper bag openings over the top opening of the collectors. Cinch the straps and tighten the bag clamps, securing the upper bags around the rim of the collector as shown in **Figure 11**.

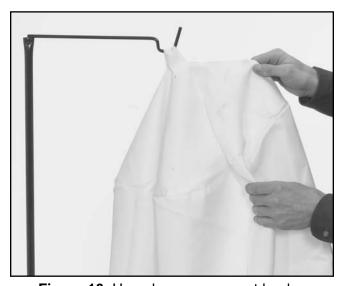


Figure 10. Hang bags on support hooks.



Figure 11. Attaching dust bags.



4 To 1 Inlet

The dust collector can operate with up to four machines running simultaneously. Included is a 4 to 1 inlet adapter that allows up to four separate lines to connect to the main assembly. There are also two inlet caps to seal off the inlets that are not used. The inlets and inlet caps are secured to the main assembly by a press on fit.



SECTION 5: DESIGNING THE SYSTEM

General

The Model G9958 can be operated as either a stationary or a mobile unit. There are advantages and disadvantages to both set-ups. The advantage of the mobile system is eliminating the cost of many ducts and fittings. On the other hand, the stationary system is more versatile and convenient.

The Model G9958 is designed to be a central dust collector system. Locate the dust collector in an out of the way location such as a corner or separate room. The dust collector is capable of collecting dust from up to four machines running simultaneously. Because of the large suction capacity of the Model G9958, great flexibility is possible in the planning and designing of your dust collection duct layout. Grizzly offers a complete line of dust collection accessories for setting up a stationary system. Additionally, Grizzly offers a complete guide book entitled *Dust Collection Basics*.

Whatever system you choose, always make sure there are no open flames or pilot lights in the same room as the dust collector. There is a risk of explosion if dust is dispursed into the air.



Material Selection

You have many choices regarding main line and branch line duct material. In most commercial workshops, the main line and branch lines are usually metal duct. Flexible hose is then used to connect each machine to the branch lines. In the case of small home shops, flexible hose may be used for both main line and branch line ducts. Plastic duct is also a popular material for home shops. Please be aware that there is a fire or explosion hazard if plastic duct material is used for dust collection without being grounded against static electrical charge build-up. This topic will be discussed later in the manual.

METAL DUCT

Metal duct comes in many varieties. Stove pipe, heating/ventilation duct and duct made especially for dust collection are all options. Advantages of metal duct is its conductivity and that it does not contribute to static electrical charge build-up. However, static charges are still produced when dust particles strike other dust particles as they move through the duct. Since metal duct is a conductor, it can be grounded quite easily to dissipate any static electrical charges. However, metal duct is generally more expensive than plastic duct and it is not usually airtight unless specifically manufactured for dust collection. Specially manufactured metal duct, on the other hand, is quite expensive. Metal duct is also generally more difficult to cut and assemble.

FLEXIBLE HOSE

Flexible rubber hose, polyethylene, plastic flexhose and other flexible ribbed hose is generally used for short runs, small shops and at rigid ductto-tool connections. There are many different types of flex hose on the market today. These are manufactured from materials such as polyethylene, PVC, cloth hose dipped in rubber and even metal, including steel and aluminum.

There are also many kinds of pure plastic flexible hose, such as non-perforated drainage type hose and dryer vent hose. Drainage type hose, while being economical, does not quite have the flexibility required for dust collection. The inside of the duct is also deeply corrugated and can increase the static pressure loss by as much as 50% over smooth wall duct. Dryer vent hose, while being completely flexible, is non-resistant to abrasion and has a tendency to collapse in a negative pressure system.

If using flex-hose, you should choose one of the many types that are designed specifically for the movement of solid particles, i.e. dust, grains and plastics. However, the cost of specifically designed flexible duct can vary greatly. Grizzly offers polyethylene hose which is well suited for

the removal of particulate matter, especially sawdust, since it is durable and completely flexible. Polyethylene is also very economical and available in a wide variety of diameters and lengths for most applications.

PLASTIC DUCT

The popularity of plastic duct is due to the fact that it is an economical and readily available product. It is also simple to assemble and easily sealed against air loss. The primary disadvantage of plastic duct for dust collection, whether black ABS or white PVC and even rubber or polyethylene flex-hose, is the inherent danger of static electrical build-up.



System Grounding

Since plastic hose is abundant, relatively inexpensive, easily assembled and air tight, it is a very popular material for conveying dust from woodworking machines to the dust collector. We recommend using flexible hose (flex-hose) to connect the woodworking machine to the dust collector. However, plastic flex-hose and plastic duct are an insulator, and dust particles moving against the walls of the plastic duct create a static electrical charge build up. This charge will build until it discharges to a ground. If a grounding medium is not available to prevent static electrical charge build up, the electrical charge will arc to the nearest grounded source. This electrical discharge may cause an explosion and subsequent fire inside the system.

To protect against static electrical charge build up inside a non-conducting duct, a bare copper wire should be placed inside the duct along its length

up.



and grounded to the dust collector. You must also confirm that the dust collector is continuously grounded through the electrical circuit to the electric service panel.

If you connect the dust collector to more than one machine by way of a non-conducting branching duct system and blast gates, the system must still be grounded as mentioned above. We recommend inserting a continuous bare copper ground wire inside the entire duct system and attaching the wire to each grounded woodworking machine and dust collector.

Be sure that you extend the bare copper wire down all branches of the system. Do not forget to connect the wires to each other when two branches meet at a Y or T connection. Use wire nuts.

Ensure that the entire system is grounded. If using plastic blast gates to direct air flow, the grounding wire must be jumped (Figure 12) around the blast gate without interruption to the grounding system.

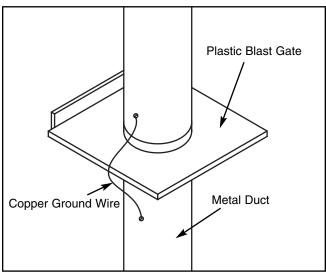


Figure 12. Ground jumper wire when using plastic blast gates and metal duct.

We also recommend wrapping the outside of all plastic ducts with bare copper wire to ground the outside of the system against static electrical charge build up. Wire connections at Y's and T's should be made with wire nuts.

Attach the bare ground wire to each stationary woodworking machine and attach the dust collector frame with a ground screw as shown in **Figure 13.** Ensure that each machine is continuously grounded to the grounding terminal in your electric service panel.

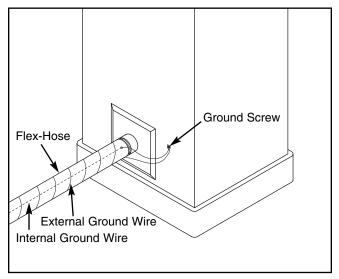


Figure 13. Flex-hose grounded to machine.



Design Suggestions

When designing a successful dust collection system, planning is the most important step. Before you set out to run the first section of duct, consider these general guidelines for an efficient system:

- Machines that produce the most saw dust should be placed nearest to the dust collector. These machines include thickness planers, shapers, sanders and bandsaws.
- 2. Ideally you should design the duct system to have the shortest possible mainline run and to have short secondary branch ducts.
- Directional changes should be kept to a minimum. The more directional change fitting you use, the greater the loss of overall static pressure.

- **4.** Gradual directional changes are more efficient than sudden directional changes (i.e. use the largest corner radius possible when changing hose or pipe direction).
- **5.** Each individual machine should have a blast gate to control suction from one machine to another.
- **6.** The simpler the system, the more efficient and less costly it will be.

The best way to plan your new system is to draw a bird's eye view (as shown in **Figure 14**) of your shop and sketch the following:

- **1.** Your desired location of the dust collector, usually in a corner or along a wall.
- 2. The location of each machine in the system.
- **3.** The location of the main line duct and each branch line.
- **4.** The location of any obtrusion such as a joist or heating duct, that will require special duct routing.

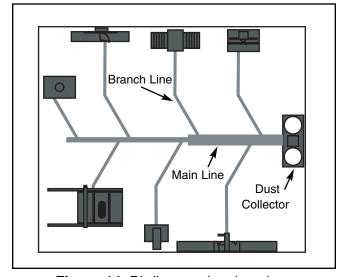


Figure 14. Bird's eye planning view.



SECTION 6: OPERATIONS

Test Run



AWARNING

Disconnect power to the machine when performing any maintenance, assembly or adjustments. Failure to do this may result in serious personal injury.



WARNING

Keep loose clothing rolled up and out of the way of machinery and keep hair pulled back.



WARNING

Wear safety glasses during the entire operations process. Failure to comply may result in serious personal injury.



CAUTION

Always wear a dust mask when operating the Model G9958. Using this machine produces sawdust which may cause allergic reactions or respiratory problems. Once assembly is complete and adjustments are done to your satisfaction, you are ready to test run the machine.

Turn on the power supply at the main panel. Press the START button. Make sure that your finger is poised on the STOP button, just in case there is a problem. The dust collector should run smoothly, with little or no vibration or rubbing noises. Strange or unnatural noises should be investigated and corrected before operating the machine further.

If you cannot easily locate the source of an unusual noise or vibration, contact our service department for help.



General

Operating your Model G9958 is simple and straightforward. Blast gates located at each of the machines controls the air flow from the woodworking machine to the dust collector. If a machine is not being used, keep the blast gate closed to maintain higher levels of efficiency throughout the system.



SECTION 7: MAINTENANCE



AWARNING

Disconnect power to the machine when performing any maintenance, assembly or adjustments. Failure to do this may result in serious personal injury.



AWARNING

Keep loose clothing rolled up and out of the way of machinery and keep hair pulled back.



AWARNING

Wear safety glasses during the entire maintenance process. Failure to comply may result in serious personal injury.

General

Regular periodic maintenance on your Model G9958 Dust Collector will ensure its optimum performance. Make a habit of inspecting your machine each time you use it. Check for the following conditions and repair or replace when necessary:

- **1.** Loose mounting bolts.
- 2. Worn switch.
- 3. Worn or damaged cords and plugs.
- **4.** Any other condition that could hamper the safe operation of this machine.
- **5.** Do not let collection bags get completely full.



Lubrication

Since all bearings are shielded and permanently lubricated, simply leave them alone until they need to be replaced. Do not lubricate them.



Bag Cleaning



CAUTION

Always wear a dust mask when changing the dust collection bags on the Model G9958. Sawdust may cause allergic reactions or respiratory problems.

It is always a good idea to empty the collection bags on a regular basis. Emptying the collection bags allows the machine to operate at a much higher level of efficiency.

Always wear the appropriate respirator or dust mask and safety glasses when emptying the collection bags. Small dust particles can escape the bags during emptying, causing them to become airborn and easily inhailed. This microscopic airborn dust is extremely unhealthy to breathe and can cause serious health problems.

While the Model G9958 excels at collecting the majority of wood dust produced by your machines, we always recommend the supplemental aid of a shop air filter such as the Grizzly G5955 or G9956. Air filters are designed to collect the smaller dust particles that a dust collector bags cannot trap.



SECTION 8: CLOSURE

The following pages contain general machine data, parts diagrams/lists, troubleshooting guide and Warranty/Return information for your Model G9958.

If you need parts or help in assembling your machine, or if you need operational information, we encourage you to call our Service Department. Our trained service technicians will be glad to help you.

If you have comments dealing specifically with this manual, please write to our Bellingham, Washington location using the address in **Section 3 Introduction.**

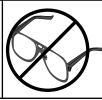
We have included some important safety measures that are essential to this machine's operation. While most safety measures are generally universal, Grizzly reminds you that each workshop is different and safety rules should be considered as they apply to your specific situation.

AWARNING

Operating this equipment has the potential for flying debris to cause eye injury. Always wear safety glasses or goggles when operating equipment. Everyday glasses or reading glasses only have impact resistant lenses, they are not safety glasses. Be certain the safety glasses you wear meet the appropriate standards of the American National Standards Institute (ANSI).







We recommend you keep a copy of our current catalog for complete information regarding Grizzly's warranty and return policy. If you need additional technical information relating to this machine, or if you need general assistance or replacement parts, please contact the Service Department listed in **Section 3 Introduction.**

Additional information sources are necessary to realize the full potential of this machine. Trade journals, woodworking magazines, and your local library are good places to start.

AWARNING

The Model G9958 was specifically designed for dust collecting operation. DO NOT MODIFY AND/OR USE THIS MACHINE FOR ANY OTHER PURPOSE. Modifications or improper use of this tool will void the warranty. If you are confused about any aspect of this machine, DO NOT use it until all your questions have been answered. Serious personal injury may occur.

WARNING

Like all power tools, there is danger associated with the Model G9958. Accidents are frequently caused by lack of familiarity or failure to pay attention. Use this tool with respect and caution to lessen the possibility of operator injury. If normal safety precautions are overlooked or ignored, serious personal injury may occur.





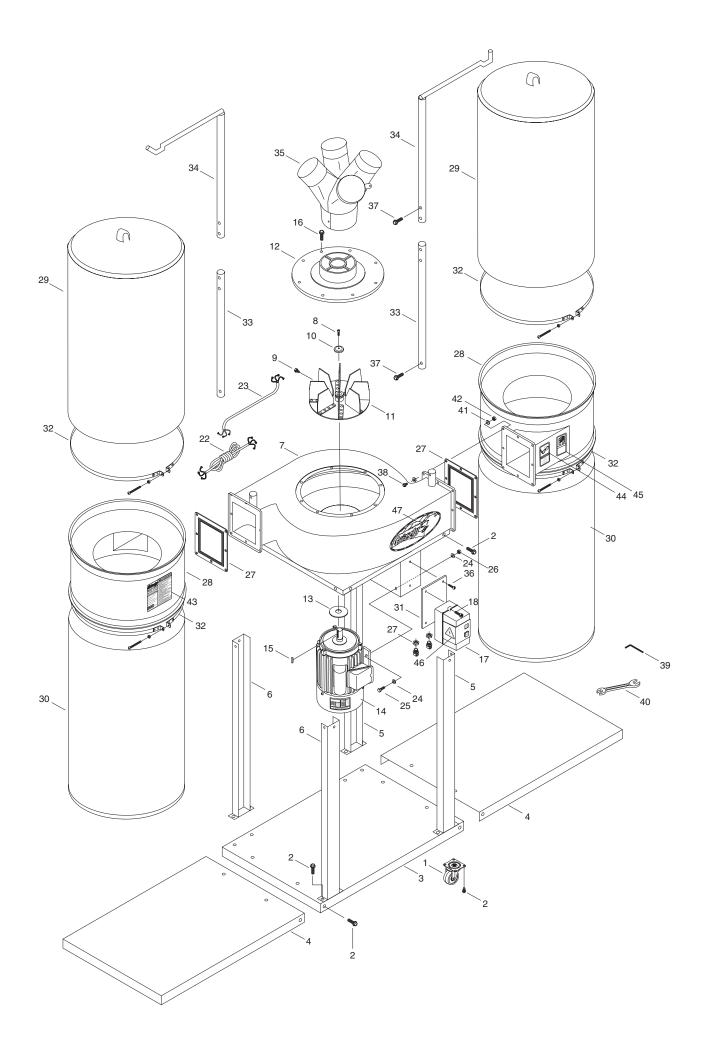
MACHINE DATA SHEET

Customer Service #: (570) 546-9663 • To Order Call: (800) 523-4777 • Fax #: (800) 438-5901

GRIZZLY MODEL G9958 4 H.P. DUST COLLECTOR

| Design Type | Single-Stage, Upright |
|---|--|
| Overall Dimensions: | |
| - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 | 102" |
| | 69" |
| | 24" |
| | 320 lbs. |
| | 49½" L x 27½ " W x 28½ " H |
| | 24" x 69" |
| Specifications: | |
| • | 9" |
| | 4" Fittings |
| Bag Size (4) | Top - 193/8" x 47"Bottom - 193/8" x 371/2" |
| | 26 Cubic Feet |
| | Bottom-FabricTop-Fabric / 1 Micron |
| Impeller Size | 13" |
| Suction Capacity | 3560 C.F.M. |
| Static Pressure (inches of water) | 16.8 |
| Construction: | |
| | Pre-formed Steel on Casters |
| • | 13" Balanced Steel |
| Motor: | |
| | TEFC Capacitor-Start Induction |
| | 4 H.P. |
| _ | Single Phase / 220 V |
| | 32 |
| | 60 Hertz / 3450 R.P.M. |
| | .Magnetic with Thermal Overload Protector |
| Bearings | Sealed & Permanently Lubricated |

Specifications, while deemed accurate, are not guaranteed.



| Ref# | Part# | Description |
|------|----------|--------------------------|
| 001 | P9958001 | CASTER |
| 002 | PB09 | HEX BOLT 1/4"-20 X 1/2" |
| 003 | P9958003 | MIDDLE BASE |
| 004 | P9958004 | SIDE BASE |
| 005 | P9958005 | RIGHT SUPPORT |
| 006 | P9958006 | LEFT SUPPORT |
| 007 | P9958007 | HOUSING |
| 800 | PSB02M | CAP SCREW M6 X 20 |
| 009 | PB08 | HEX BOLT %"-16 X 1" |
| 010 | P9958010 | FLAT WASHER M6 |
| 011 | P9958011 | IMPELLER |
| 012 | P9958012 | INLET COVER |
| 013 | P9958013 | GASKET |
| 014 | P9958014 | MOTOR |
| 015 | P9958015 | KEY 8 X 8 X 50 |
| 016 | PB07 | HEX BOLT 1/4"-20 X 3/4" |
| 017 | P9958017 | SWITCH |
| 018 | P9958018 | HEX BOLT 3/16"-24 X 3/4" |
| 019 | P9958019 | FLAT WASHER 3/16" |
| 020 | P9958020 | HEX NUT ¾16" |
| 021 | P9958021 | WIRE PROTECTOR |
| 022 | P9958022 | POWER CORD |
| 023 | P9958023 | MOTOR CORD |

| Ref# | Part# | Description |
|------|----------|-------------------------|
| 024 | PW07 | FLAT WASHER 5/16" |
| 025 | PB03 | HEX BOLT 5/16"-18 X 1" |
| 026 | PN02 | HEX NUT 5/16" |
| 027 | P9958027 | GASKET |
| 028 | P9958028 | COLLECTOR DRUM |
| 029 | P9958029 | UPPER DUST BAG |
| 030 | P9958030 | LOWER DUST BAG |
| 031 | P9958031 | SWITCH PLATE |
| 032 | P9958032 | BAND CLAMP |
| 033 | P9958033 | UPPER BAG HANGER |
| 034 | P9958034 | LOWER BAG HANGER |
| 035 | P9958035 | INLET HOLE MANIFOLD |
| 036 | P9958036 | PHILLIPS® HEAD SCREW |
| 037 | PB19 | HEX BOLT 1/4"-20 X 1/2" |
| 038 | PB03 | HEX BOLT 1/4"-20 X 1" |
| 039 | PAW05M | ALLEN® WRENCH |
| 040 | PWR1012 | COMBO WRENCH 10 X 12MM |
| 041 | PW06 | FLAT WASHER 1/4" |
| 042 | PN05 | HEX NUT 1/4" |
| 043 | P9958043 | WARNING/MACHINE ID |
| 044 | P9958044 | SAFETY GLASSES LABEL |
| 045 | P9958045 | READ MANUAL LABEL |
| 046 | P9958046 | SWITCH LABEL |
| 047 | G8589047 | LARGE CAST LOGO |

WARRANTY AND RETURNS

Grizzly Industrial, Inc. warrants every product it sells for a period of **1 year** to the original purchaser from the date of purchase. This warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence, accidents, repairs or alterations or lack of maintenance. This is Grizzly's sole written warranty and any and all warranties that may be implied by law, including any merchantability or fitness, for any particular purpose, are hereby limited to the duration of this written warranty. We do not warrant or represent that the merchandise complies with the provisions of any law or acts unless the manufacturer so warrants. In no event shall Grizzly's liability under this warranty exceed the purchase price paid for the product and any legal actions brought against Grizzly shall be tried in the State of Washington, County of Whatcom.

We shall in no event be liable for death, injuries to persons or property or for incidental, contingent, special, or consequential damages arising from the use of our products.

To take advantage of this warranty, contact us by mail or phone and give us all the details. We will then issue you a "Return Number," which must be clearly posted on the outside as well as the inside of the carton. We will not accept any item back without this number. Proof of purchase must accompany the merchandise.

The manufacturers reserve the right to change specifications at any time because they constantly strive to achieve better quality equipment. We make every effort to ensure that our products meet high quality and durability standards and we hope you never need to use this warranty.

Please feel free to write or call us if you have any questions about the machine or the manual.

Thank you again for your business and continued support. We hope to serve you again soon.

WARRANTY CARD

| Nar | ne | | | | |
|-------|---|--|-----------|--|--|
| Stre | eet | | | | |
| City | | | | | Zip |
| • | | | | | - |
| | | | | FAX | |
| MO | DEL # G9958 4 H.P. Dust | Collector Order #_ | | | |
| | | | | | |
| The f | ollowing information is given on a | voluntary basis. It will be used for n | narketing | purposes to help us develop bette | er products and services. Of |
| | se, all information is strictly confide | - | | | • |
| | | | | | |
| 1. | How did you learn about us? | | | | |
| | Advertisement | Friend | 10. | Which benchtop tools do you own? | Check all that apply. |
| | Catalog | Card Deck | | | |
| | World Wide Web | | | 1" x 42" Belt Sander | 6" - 8" Grinder |
| | Other | | | 5" - 8" Drill Press 8" Table Saw | Mini Lathe 10" - 12" Thickness Planer |
| | Otilei | | | 8" - 10" Bandsaw | Scroll Saw |
| 2. | Which of the following magazines d | o you subscribe to. | | Disc/Belt Sander | Spindle/Belt Sander |
| | A | Donatical Harman | | Mini Jointer | |
| | American Woodworker Cabinetmaker | Practical Homeowner Shop Notes | | Other | |
| | Family Handyman | Today's Homeowner | | | |
| | Fine Homebuilding | WOOD | 11. | How many of the machines checked | ed above are Grizzly? |
| | Fine Woodworking Home Handyman | Wooden Boat | 12. | 12. Which portable/hand held power tools do you own? Che | |
| | Journal of Light Construction | Woodshop News Woodsmith | | | , |
| | Old House Journal | Woodwork | | Belt Sander | Orbital Sander |
| | Popular Mechanics | Woodworker | | Biscuit Joiner Circular Saw | Palm Sander Portable Planer |
| | Popular Science Popular Woodworking | Woodworker's Journal Workbench | | Detail Sander | Saber Saw |
| | | Workbench | | Drill/Driver | Reciprocating Saw |
| | Other | | | Miter Saw | Router |
| 3. | Which of the following woodworking | g/remodeling shows do you watch? | | Other | |
| | Backyard America | The New Yankee Workshop | 13. | What machines/supplies would you | Llike Grizzly Industrial to carny? |
| | Home Time | This Old House | 10. | what machines/supplies would you | Tine diizziy industrial to carry: |
| | The American Woodworker | Woodwright's Shop | | | |
| | Other | | | | |
| 4 | | | | | |
| 4. | What is your annual household inco | one: | 14. | What new accessories would you I | ike Grizzly Industrial to carry? |
| | \$20,000-\$29,999 | \$60,000-\$69,999 | | • | , |
| | \$30,000-\$39,999 | \$70,000-\$79,999 | | | |
| | \$40,000-\$49,999 | \$80,000-\$89,999 | | | |
| | \$50,000-\$59,999 | \$90,000 + | 4- | M/ | |
| 5. | What is your age group? | | 15. | what other companies do you purc | chase your tools and supplies from? |
| | 20-29 | 50-59 | | | |
| | 30-39 | 60-69 | | | |
| | 40-49 | 70 + | | | |
| _ | | udua vO | 16. | Do you think your purchase repres | ents good value? |
| 6. | How long have you been a woodwo | orker? | | Yes | No |
| | 0 - 2 Years | 8 - 20 Years | | | _ |
| | 2 - 8 Years | 20+ Years | 17. | Would you recommend Grizzly Ind | ustrial to a friend? |
| 7. | How would you rank your woodwork | king skills? | | Yes | No |
| | | | 40 | | |
| | Simple Intermediate | Advanced Master Craftsman | 18. | in your area? Note: We never use | ne as a reference for Grizzly customer |
| | | | | • | |
| 8. | What stationary woodworking tools | do you own? Check all that apply. | | Yes | No |
| | Air Compressor | Panel Saw | 19. | Comments: | |
| | Band Saw | Planer | | | |
| | Drill Press Drum Sander | Power Feeder Radial Arm Saw | | | |
| | Druff Sander Dust Collector | Radial Affil Saw Shaper | | | |
| | Horizontal Boring Machine | Spindle Sander | | | |
| | Jointer | Table Saw | | | |
| | Lathe Mortiser | Vacuum Veneer Press Wide Belt Sander | | | |
| | | | | | |
| | Other | | | | |

| FOLD ALONG DOTTED LINE | |
|------------------------|------------------------|
| | Place Stamp Here |



GRIZZLY INDUSTRIAL, INC. P.O. BOX 2069 BELLINGHAM, WA 98227-2069

| | Haladadaadallaadadllaadladdaalladdaallaad |
|------------------------|---|
| FOLD ALONG DOTTED LINE | |

Send a Grizzly Catalog to a friend:

| NameStreet | | | |
|------------|--------|-----|--|
| City | _State | Zip | |